

### Remarks

Claims 1-6 are pending and stand rejected as anticipated by an earlier patent to Pugh in view of Dowling. Claims 1 and 3 have been amended to make clear that the calculated voltage drop is a function of the measured winding current and motor speed. Support for this language can be found in the originally filed specification on page 6, lines 7-24; no new matter has been added.

Claim 1 is directed to a method for detecting an open winding condition in a motor which in part requires “measuring a winding voltage, a winding current and a motor speed,” and using “a calculated voltage drop for a non-open winding condition as a function of the measured winding current and motor speed.” Such an arrangement is not taught or suggested by the prior art.

Pugh describes calculating a nominal expected voltage across motor windings, but this is not based on “measuring a winding voltage, a winding current and a motor speed,” and using “a calculated voltage drop for a non-open winding condition as a function of the measured winding current and motor speed” as is required by claim 1. *Col. 2, lines 47-48*. Rather, Pugh uses a parallel voltage divider circuit arrangement that has absolutely no relationship to motor speed. *See Fig. 4*.

Dowling describes measuring a number of operational parameters including winding voltage, winding current and motor speed (shaft speed), but simply lacks any suggestion of using all three of these together to determine “a calculated voltage drop for a non-open winding condition as a function of the measured winding current and motor speed” as is required by claim 1. *See, e.g., col. 2, lines 34-40*.

Thus, no combination of Pugh or Dowling, separately or together, teaches or suggests a method for detecting an open winding condition in a motor as required by claim 1. Claim 2 depends from claim 1 and is allowable for the same reasons.

Independent claim 3 is directed to a method for detecting an open winding condition in a dual-stator redundant motor which is similar to claim 1 in that it in part requires using “a

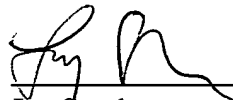
calculated voltage drop value" for each stator winding "as a function of the measured ... winding current and motor speed." As with claim 1, neither Pugh nor Dowling suggests such an arrangement for the reasons given above. Claims 4-6 depend from claim 3 and are allowable for the same reason.

### **Conclusion**

Applicants believe that no extension of time is required; however, this conditional petition is made to provide for the possibility that the applicant has inadvertently overlooked the need for an extension of time. If any additional fees are required for the timely consideration of this application, please charge deposit account number 19-4972.

It is submitted that all the claim rejections have been addressed and that all of the pending claims are now in a condition for allowance. Reconsideration of the application and issuance of a notice of allowance are respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is invited to call applicants' attorney at the telephone number listed below.

Respectfully submitted,



Jay Sandvos  
Registration Number 43,900  
Attorney for Applicants

**BROMBERG & SUNSTEIN LLP**  
125 Summer Street  
Boston, MA 02110-1618  
Tel: (617) 443-9292  
Fax: (617) 443-0004

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